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10/525,340	09/07/2005	Hiroyuki Kojima	266229US6PCT	3706
22850	7590	09/21/2007	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			HSU, AMY R	
			ART UNIT	PAPER NUMBER
			2622	
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			09/21/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

Application No.

10/525,340

Applicant(s)

KOJIMA ET AL.

Examiner

Amy Hsu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/22/2005, 6/21/2006, 6/7/2007.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 7, 12, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Ebihara et al. (US 5956092).

Regarding Claim 1, Ebihara teaches an image processor for processing a video signal, characterized in comprising: aspect ratio information acquisition means for acquiring aspect ratio information about an original video signal (*Fig. 1 reference number 101 and Col 8 Lines 58-64 teaches that the picture analysis circuit analyzes the signal and Col 5 Lines 1-10 describes more detail of the analysis including detecting aspect ratio information*); aspect ratio conversion means for carrying out a process of aspect ratio conversion based on the acquired aspect ratio information in such a manner that the roundness of an image of the original video signal becomes 1 (*Fig. 1 reference number 102 and Col 10 Lines 43-53 teaches that the aspect converting circuit takes input and converts the signal in such a way to expand to fully occupy the screen, and the corresponding Fig. 4 shows that after the conversion the roundness becomes 1 as seen on the right side of Fig. 4, the circles are not distorted*); background signal generation means for generating a video signal serving as

background of the video signal that is the main image (*Fig. 7 reference number 5 and Col 17 Lines 39-46 teaches the apparatus generates a black background, which is seen in Figs. 25 and 26 as a black margin*); and video signal combination means for executing a process of combining the video signal and a background signal which both have been subjected to aspect ratio conversion (*Figs. 25 and 26 are examples of the background signal combined with the video signal, or image*). Ebihara teaches an apparatus, which is a television receiver with processing apparatus and capability, and although Ebihara discloses the invention in several embodiments, one of ordinary skill in the art will recognize the disclosure in its entirety as a teaching of the television receiver with image processing capability. For example in Col 17 Lines 36-38 Ebihara teaches that the sixth embodiment is similar to the second except for design changes, this means the reader of ordinary skill in the art will be able to recognize the combination of embodiments as a teaching of the television receiver apparatus.

Regarding Claim 2, Ebihara teaches the image processor according to claim 1, characterized in that the aspect ratio information acquisition means acquires the aspect ratio information based on identification information added to the input video signal. The system of Fig. 1 derives information from the received inputted signal (Col 11 Lines 61-63) regarding aspect ratio information, which is in the form of different modes which correspond to aspect ratios as described in Col 10.

Regarding Claim 3, Ebihara teaches the image processor according to claim 1, characterized in that the aspect ratio conversion means has an operation mode in which the aspect ratio of the video signal is changed automatically based on information about the input video signal (*Col 11 starting from Line 7 describes the procedure after the picture is analyzed by reference number 101, the picture analysis circuit, and Col 11 Lines 30-34 teaches that modes 2-4, not mode 1, are selected based on aspect ratio information from 101, and Col 10 starting from line 25 describes modes 2-4 automatically converting aspect ratio*), and an operation mode in which the aspect ratio of the video signal is changed using a fixed scaling factor determined without referring to an input signal (*Mode 1 in Col 10 Lines 11-14*).

Regarding Claim 4, Ebihara teaches the image processor according to claim 1, characterized in that the aspect ratio conversion means changes the aspect ratio of the original video signal by pixel number conversion. Fig. 4 is an example of the change after the aspect ratio conversion. The right side, converted image has more pixels in the effective (non black) area, and therefore the number of pixels was converted from the original left side picture of Fig. 4.

Regarding Claim 5, Ebihara teaches the image processor according to claim 1, characterized in that the aspect ratio conversion means changes the aspect ratio of the original video signal in such a manner that the input image has roundness of 1 and has the maximum size fitting in the selected screen. Col 10 Lines 50-51 describes how the

conversion of aspect ratio involves expanding the image to fully occupy the screen, with roundness of 1 as seen in Fig. 4.

Regarding Claim 7, Ebihara teaches the image processor according to claim 1, characterized in that the video signal combination means determines the size of the video signal. Col 17 Lines 39-46 teaches the combined image with black background as depicted in Fig. 26, and therefore the combination means determines the size of the signal because the full signal is comprised of the image and the black background.

Claim 12 is a method claim corresponding to Claim 1 and is therefore similarly rejected.

Claim 17 is a computer program written in a computer-readable format to execute on a computer system a process with limitations of Claim 1 and is therefore similarly rejected.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ebihara et al. (US 5956092).

Regarding Claim 6, Ebihara teaches the image processor according to claim 1, characterized in that the background signal generation means performs signal generation using the same signal format as that of the video signal generated by the aspect ratio conversion means, the generated background comprising images derived by a program filling in a rectangular region. Col 11 Lines 30-34 teaches that the converted signal is in accordance with the format or the type of incoming video signal detected by the picture analysis circuit. Mode 4 as seen in Fig. 5 shows the background signal, the black area, as part of the converted image, so it is also in accordance with the format of the original signal and the converted effective area. The background is a rectangular region other than the effective image area as seen in Fig. 5. However Ebihara does not specifically teach the formats of bitmap or JPEG or combination. Since bitmap and JPEG formats are very common formats for image signals, it would have been obvious to one of ordinary skill in the art at the time of the invention to realize the formats taught by Ebihara could be JPEG or bitmap because using these formats would produce predictable results.

5. Claims 8-11, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebihara et al. (US 5956092) in view of Hirose (US 6680747).

Regarding Claim 8, Ebihara teaches the image processor according to claim 1, but does not teach recording means for recording the video signal created by combination of images onto a removable recording medium. Hirose teaches an image processing apparatus which records a video signal processed by the image processing apparatus to a recording medium (*Col 6 Lines 20-24*). One of ordinary skill in the art will recognize that a removable recording medium such as a memory card is a standard recording medium. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teaching of Ebihara with that of Hirose to record the processed image to a removable recording medium in order to use the processed images elsewhere other than the apparatus. The results of this combination would yield predictable results since recording to a removable medium is a standard and well known function.

Regarding Claim 9, Ebihara teaches the image processor according to claim 8, characterized in that the aspect ratio conversion means carries out aspect ratio conversion with respect to the original video signal in such a manner that the image has roundness of 1 and has the maximum size fitting in the particular screen reproducing the video signal (*Col 10 Lines 50-52*). Ebihara does not teach this processed image is recorded on a removable medium. This is addressed with Claim 8.

Regarding Claim 10, Ebihara teaches the image processor according to claim 8, characterized in that the background signal generation means generates a background



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signal of a size the same as the screen that is selected for reproducing the video signal, or a size needed for combination of video images. Col 17 Lines 39-46 teaches the combined effective image with background as seen as a black margin in Figs. 25 or 26. Ebihara does not teach this processed image is recorded on a removable medium. This is addressed with Claim 8.

Regarding Claim 11, Ebihara teaches the image processor according to claim 8, characterized in that when the image after conversion by the aspect ratio conversion means has the aspect ratio different from the preset aspect ratio at the time of recording, the video signal combination means adds the background signal around the video signal that is regarded as main to generate an image of any desired aspect ratio to matching the two. Mode 4 as seen in Fig. 5 and Col 10 Lines 61 through Col 11 Line 7 teaches that background image, seen as black area, is filled in where the effective image is not reached.

Claim 13 is a method claim corresponding to Claim 8 and is therefore similarly rejected.

Claim 14 is a method claim corresponding to Claim 9 and is therefore similarly rejected.

Claim 15 is a method claim corresponding to Claim 10 and is therefore similarly rejected.

Claim 16 is a method claim corresponding to Claim 11 and is therefore similarly rejected.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure including Asaida et al. (US 5801772 and US 5659356), and Han (US 6229574).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy Hsu whose telephone number is 571-270-3012. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on 571-272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amy Hsu

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ARH 9/9/07

A handwritten signature in black ink, appearing to read 'Lin Ye', with a stylized, flowing script.

LIN YE  
SUPERVISORY PATENT EXAMINER